## UNIFIED FACILITIES CRITERIA (UFC)

# DESIGN: HEATING AND COOLING DISTRIBUTION SYTEMS



APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

#### **UNIFIED FACILITIES CRITERIA (UFC)**

#### **DESIGN: HEATING AND COOLING DISTRIBUTION SYSTEMS**

Any copyrighted material included in this UFC is identified at its point of use. Use of the copyrighted material apart from this UFC must have the permission of the copyright holder.

U.S. ARMY CORPS OF ENGINEERS (Preparing Activity)

AIR FORCE CIVIL ENGINEER SUPPORT AGENCY

Record of Changes (changes are indicated by \1\ ... /1/)

Change No.	Date	Location

This UFC supersedes TI 810-32, dated 10 January 2002. The format of this UFC does not conform to UFC 1-300-01; however, the format will be adjusted to conform at the next revision. The body of this UFC is a document of a different number.

#### **FOREWORD**

The Unified Facilities Criteria (UFC) system is prescribed by MIL-STD 3007 and provides planning, design, construction, sustainment, restoration, and modernization criteria, and applies to the Military Departments, the Defense Agencies, and the DoD Field Activities in accordance with <a href="USD(AT&L">USD(AT&L</a>) Memorandum dated 29 May 2002. UFC will be used for all DoD projects and work for other customers where appropriate.

UFC are living documents and will be periodically reviewed, updated, and made available to users as part of the Services' responsibility for providing technical criteria for military construction. Headquarters, U.S. Army Corps of Engineers (HQUSACE), Naval Facilities Engineering Command (NAVFAC), and Air Force Civil Engineer Support Agency (AFCESA) are responsible for administration of the UFC system. Defense agencies should contact the preparing service for document interpretation and improvements. Technical content of UFC is the responsibility of the cognizant DoD working group. Recommended changes with supporting rationale should be sent to the respective service proponent office by the following electronic form: Criteria Change Request (CCR). The form is also accessible from the Internet sites listed below.

UFC are effective upon issuance and are distributed only in electronic media from the following sources:

- Unified Facilities Criteria (UFC) Index http://65.204.17.188//report/doc\_ufc.html.
- USACE TECHINFO Internet site http://www.hnd.usace.army.mil/techinfo/index.htm.
- NAVFAC Engineering Innovation and Criteria Office Internet site <a href="http://criteria.navfac.navy.mil">http://criteria.navfac.navy.mil</a>.
- Construction Criteria Base (CCB) system maintained by the National Institute of Building Sciences at Internet site <a href="http://www.nibs.org/ccb">http://www.nibs.org/ccb</a>.

Hard copies of UFC printed from electronic media should be checked against the current electronic version prior to use to ensure that they are current.

**AUTHORIZED BY:** 

DONALD L. BASHAM, P.E.

Chief, Engineering and Construction Division

U.S. Army Corps of Engineers

ATHLEEN LEERGUSON P.E.

The Deputy Civil Engineer DCS/Installations & Logistics Department of the Air Force

DR. JAMES W. WRIGHT, P.E.

Chief Engineer

**Naval Facilities Engineering Command** 

FRANK LANE

Director of Analysis & Investment Deputy Under Secretary of Defense for Installations and Environment Department of Defense

### **UNIFIED FACILITIES CRITERIA (UFC)**

**DESIGN: HEATING AND COOLING DISTRIBUTION SYSTEMS** 

The text of this UFC is the previous TI 810-32, dated 10 January 2002. The URL to access the document is:

TI 810-32 Index